

# NEW ZEALAND ECOLOGICAL SOCIETY

## Newsletter

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### FROM THE EDITOR

Kia ora koutou! Happy spring! Big news this newsletter is the upcoming conference in Christchurch. Don't miss early bird registration on 29 September. The organising committee have some exciting events planned for us and they have been making a huge amount of effort into making the conference sustainable. The Society AGM is an important part of the conference. This year, there are a number of council positions that need to be filled. See 'News from Council' for further details and contact an existing council member if you'd like to know more about what being on council involves.

In other news from council, our president, Chris Bycroft and Shona Myers (president of INTECOL) attended the ESA conference in Baltimore last month. Don't miss the conference report by Chris and Shona and the letter calling for action on climate change.

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### ILLUSTRATE ECOLOGY



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*Leaf dimple galls and chlorotic spots on  
Pittosporum crassifolium leaves induced  
by Pittosporum psyllid, Trioza vitreoradiata  
(Hemiptera: Triozidae) nymphs feeding  
on young leaves. See Nicholas's article on  
monitoring invertebrate biodiversity for  
further information on using plant signs to  
identify invertebrate presence.  
Photo: Nicholas Martin.*

**Newsletter Editor:** Cate Macinnis-Ng. E-mail: [newsletter@nzec.org.nz](mailto:newsletter@nzec.org.nz)

**Layout and design:** Jeremy Rolfe

*The deadline for submissions for the next issue of this newsletter is Friday 11 December 2015.*

We have some fascinating articles in this edition of the newsletter covering ecological impact assessment, invertebrate biodiversity, eel fisheries and some more on Twitter. It was pointed out to me yesterday that I use a paper diary and a paper to-do list and I'm still a huge Twitter fan. I guess that's proof that Twitter is not just for technology enthusiasts.









Would you like to make some contributions to the Newsletter? I am looking for someone to produce the popular Ecotones segment. Ecotones highlights recent ecological research in NZ published in journals other than NZJecol. Bruce Burns wrote it in a format accessible to the general public and ecologists alike. For a recent example, see the March 2014 edition of the newsletter [http://newzealandecology.org/sites/default/files/EcolNews\\_March\\_2014\\_147.pdf](http://newzealandecology.org/sites/default/files/EcolNews_March_2014_147.pdf). Contributions as a one-off or once or twice a year would be welcome. This is a great way to keep track of recent research. Please send me a message or come and have a chat at the conference if you would like to nominate someone or give it a go yourself.

Cate Macinnis-Ng

## NZ ECOLOGISTS ON TWITTER

Tim Curran, Lincoln University

The NZES conference this year is using social media such as Twitter and Facebook to promote the event and help get our science and ideas out into the wider community. To facilitate this the NZES Newsletter has been running some articles on the use of Twitter and why it can be a great tool for ecologists. In the June 2015 newsletter, Cate Macinnis-Ng gave her top seven reasons to be on Twitter. In this article eight NZ ecologists who are on Twitter share their reasons for signing up and discuss the pros and cons of this platform. Many thanks to Cate, Rob, Helen, Fleur, Ben, Imogen, and Margaret for doing the survey. Happy reading, we hope to see many more of you on Twitter soon, hopefully in time for the conference!

 <p><b>Cate Macinnis-Ng</b> @LoraxCate FOLLOWS YOU Tree ecophysiologicalist, wife, mother, ocean swimmer and brownie baker. I'm interested in forests, water, carbon and climate change. Lecturer @AucklandUni Auckland</p>	 <p><b>Rob Cruickshank</b> @bugblokenz FOLLOWS YOU academic   entomologist   molecular ecologist   museum junkie   nemophilist (woodland enthusiast)   bug hotelier   maker Christchurch, New Zealand</p>	 <p><b>NZ Batman</b> @NZBatman FOLLOWS YOU Bat advocate with a mission to educate the public about #bats and #conservation issues. All tweets are my own. Retweet &amp; follows are not endorsements. #akibats Auckland, New Zealand</p>	 <p><b>Imogen Bassett</b> @ImogenBassett FOLLOWS YOU Biosecurity; ecology; invasive species; opinions my own</p>
 <p><b>Margaret Stanley</b> @mc_stanley1 FOLLOWS YOU University of Auckland ecologist working on conservation, invasive species, plant-animal interactions and urban ecology.... Auckland, New Zealand</p>	 <p><b>Fleur Maseyk</b> @MaseykF Eco (Logical) Champion and freelance ecologist. Palmerston North</p>	 <p><b>Helen Taylor</b> @HelenTaylorCG FOLLOWS YOU Conservation geneticist, outdoors adventurer, and (currently) bird sperm whisperer. Postdoc @otago but views are my own. Dunedin, New Zealand</p>	 <p><b>Tim Curran</b> @TimCurran5 scientist   teacher   ecologist   dad   bibliophile   cricket tragic   citizen sci. Uses traits to understand plant responses to disturbance</p>

What a happy bunch of NZ ecologists who are on Twitter! There are some great Twitter handles here; from @LoraxCate who speaks for the trees, to NZ's chiropteran superhero @NZBatman and the laid-back @bugblokenz. This also shows how people describe what they do, who they are and share a little about themselves (just refrain from mentioning the Ashes to Tim, unless you want to see some tears). If you join Twitter be sure to follow these and many other NZ ecology tweeps.

Twitter user	What is your Twitter handle and current position? How long have you been on Twitter?	Why did you join Twitter?	What are the best aspects of being on Twitter?	Are there any downsides to being on Twitter?
Cate Macinnis-Ng	@LoraxCate, Lecturer in Ecology University of Auckland Since April 2013	Bowed to pressure from Siouxsie Wiles. She's a twitter evangelist!	Staying in touch with remote colleagues, keeping up to date with latest research, being a part of a wider community, following conferences remotely, #womeninscience, finding out about interesting blogs, publicising my work and that of colleagues, new collaborations, some fun	None that I've found!
Rob Cruickshank	@bugblokenz, Senior Lecturer in Entomology at Lincoln University Since November 2013	A colleague suggested I should try it. I was at a conference where several people were live tweeting and I didn't want to feel left out.	Twitter is a global academic tea room that has connected me with professional colleagues and like-minded people who I would not have made contact with in any other way, which has resulted in a number of productive discussions and collaborations. I also find live tweeting at conferences is a useful way of taking notes (and keeping myself awake after lunch). Following the live tweets of people at conferences I can't get to, or in labs and research groups around the world, makes me feel connected to what's going on in my discipline. More recently, I've also discovered groups like #SciChatNZ, #SciCommNZ, and #CitSciChat, who "meet up" on Twitter at prearranged times for conversations about shared interests, a bit like a chat room but more public.	It takes time to keep on top of Twitter, but the beauty of it is that you can dip in and out of it as time permits. I often take several days off without looking at Twitter when I'm busy with other things, knowing that I can come back to it whenever I want. Another downside is that if you say something stupid on Twitter, lots of people get to hear about it, but that usually just focuses the mind. Most people on Twitter (at least in my network) are friendly and forgiving. Twitter allows you to build a supportive network of people who share a similar outlook and interests to you, which is great, but that also means it's important to guard against confirmation bias.
Ben Paris	@nzbatman Senior Biodiversity Advisor, Auckland Council Since 2012	Initially to promote the work I was doing with bats, but it has grown much more than that. I now use it to connect with new news, take part in discussions, and tweet about talks.	There is always someone out there to help, being a tricky question, promotion of events, or just offering an opinion of experience.	It is often seen as "time wasting" by older generations/managers who don't understand the value of twitter.
Imogen Bassett	@ImogenBassett Biosecurity Advisor Auckland Council About a month	I joined because Jacqueline Beggs strongly encouraged me to, making a compelling case for work-related benefits. I'm very glad I followed her advice!	Twitter is very useful for easily keeping up to date with interesting recent publications and other science-related goings-on. It's also very useful for making/maintaining professional networks.	The downside of twitter when working for a (local) government agency and being involved in public consultations on controversial issues, is that I have to be very careful about what I say on twitter, and also what I say in person in situations such as giving talks to academic audiences where audience members may tweet my comments.

Twitter user	What is your Twitter handle and current position? How long have you been on Twitter?	Why did you join Twitter?	What are the best aspects of being on Twitter?	Are there any downsides to being on Twitter?
Margaret Stanley	@mc_stanley1 Senior Lecturer University of Auckland About a year	Build a research profile, increase my citations	Very quick, easy way to stay in touch with the very latest science and access paper of interest. Great for accessing excellent resources for teaching. Connecting with new collaborators. Connecting with endusers (eg councils) & the public Breaking the ice at conferences if you've already 'met' people on twitter	Don't try & read everything!! Just used it when you can so it doesn't become a hassle Mute people instead of unfollowing!!! If people are tweeting too much about irrelevant stuff
Fleur Maseyk	@MaseykF ; PhD candidate with ARC Centre of Excellence for Environmental Decisions, University of Queensland and Practice Leader–Ecology, The Catalyst Group, Palmerston North 2.5 years	Supervisor pressure.	I find it a quick, easy, and often funny way to access interesting stuff while avoiding the rubbish.	It's more time looking at a screen.
Helen Taylor	@HelenTaylorCG, Postdoctoral fellow, University of Otago Was on for ~3 years for my previous job in public relations about 5 years ago. Left when I left PR and recently rejoined in March this year.	As an early career scientist, I can't think of a reason not to do it - so helpful for your career. I can engage with scientists internationally, stay on top of new research, and promote my own work.	See previous. :) Also, getting involved in international # campaigns - a great way to feel part of a bigger community when you're all the way over in NZ.	Just the fact that it can be a bit of a distraction, but you could say that about any social media.
Tim Curran	@TimCurran8, Senior Lecturer in Ecology, Lincoln University Since April 2014	I had seen snippets of Tweeting from a couple of interesting conferences and I realised that I was missing out. Since then I haven't looked back.	I really like Rob's analogy of Twitter as a 'global tearoom'. It means that you can chat with anyone on any topic, make connections or even just listen in while others exchange ideas. It is a really efficient way to get notified of new research, ideas or topical issues relating to science, academia or whatever you are interested in. I also really like dipping into fields that I used to be interested in (I have a fascination with both sharks and big cats), but simply don't have the time to follow in the literature. Via Twitter I can reconnect with these things in a time-efficient way. Finally, it is a fantastic way to get science out in the public sphere, be it with teachers (e.g. #SciChatNZ), students, conservation practitioners, decision makers, or other interested people.	It can be a distraction at times, but on balance I reckon the benefits far outweigh any negatives. I highly recommend it, particularly to early career ecologists, if only for the job adverts and career advice. I am hopeless at 'live-tweeting' a talk; I pontificate about my Tweets and am a two-finger typist (=too slow).

## EIANZ ROADSHOW

*Dr Judith Roper-Lindsay, JR-L Consulting Ltd*

The Ecological Impact Assessment Guidelines produced by the EIANZ New Zealand Chapter were actively promoted throughout August at a series of presentations across the country. Entitled “*Guidelines for better ecological practice in NZ*” the presentations addressed both the recently released publication and the ways in which ecologists in a range of jobs and roles, can take a more professional and ethical approach to their work.

Dr Ian Boothroyd (President NZ Chapter of the Environment Institute of Australia and New Zealand) and Dr Judith Roper-Lindsay (Guidelines Editor and contributor) led discussions in Christchurch, Auckland, Wellington and Palmerston North. In Wellington Stephen Fuller contributed a practical perspective of using the “Regini matrix” approach in roading projects in the Region. Over 170 ecologists, planners, engineers, lawyers and students attended the five events in total, and further sessions are planned for other centres; a webinar version will also be held for those members who live away from the main centres.

The Guidelines were well-received and many attendees took the time to provide positive feedback and suggestions for improvements in the next version which is targeted for the first half of 2016. Some major companies and local authorities are already using the Guidelines as a framework for their project assessments and consent audits.

EIANZ is keen to hold other webinars to deal with specific areas in more detail; for example, adaptive management, monitoring, or use of the “Regini matrix”. The New Zealand Chapter ecologists would also like to develop “Practice Notes” on topics such as monitoring for specific species, assessing effects on linear habitats, or incorporating lizards in impact assessment. Of course all these things require volunteer time, so any volunteers to lead these activities would be welcomed.

The role of the Institute in improving practice and ethics is important for all professionals, and the number of ecologists becoming a “Certified Environmental Practitioner – Ecology specialist” in New Zealand is growing.

Version 1 of the Guidelines is now being sent to a selection of other professional bodies to seek their comments and endorsement. Together with practice guidance, they will be the topic of a Workshop at NZES2015 on “*What makes a Professional Ecologist*”.

**Note from NZES council:** *This information on Version 1 of the EIANZ guidelines is presented as information to our membership. At this stage the New Zealand Ecological Society has not been involved with its production, and has not formally reviewed these guidelines. A process for reviewing Version 1 of these guidelines and the potential to provide feedback to both the authors and our membership will be discussed further by the NZES council.*

## MONITORING INVERTEBRATE BIODIVERSITY – ANYONE CAN DO IT!

*Nicholas Martin, Scientist, Honorary Fellow, Plant and Food Research*

In the late 1990s when I was involved in Crop Protection, the requirements for the top brand of some UK supermarkets included the farmer/grower doing something for native biodiversity. This might include encouraging hares or planting wild flowers round the edge of the field. Translated to New Zealand, this would mean protecting and enhancing an area of native habitat, or if there were none on the farm, planting native trees and shrubs. It seemed to me that a measure of the success of the native habitat restoration was needed that went beyond the number of plant species. As invertebrates form the bulk of our native biodiversity a measure of the species of invertebrate herbivores associated with a selection of the plant species could do this. I also realised that many invertebrate herbivores cause distinctive damage on a plant and that it would be possible for a non-expert to identify the species of herbivore with a photographic guide. Hence the concept behind Plant-SyNZ.

While the concept failed to get funding for its development, the database of invertebrate herbivore-plant associations took a life of its own and is available on the internet, [//plant-synz.landcareresearch.co.nz/SearchForm.aspx](http://plant-synz.landcareresearch.co.nz/SearchForm.aspx). It is now also includes flower visitors.

The original concept was paper based, but the advent of tablet computers means that we can use much higher quality photographs. A tablet computer is ideal for scrolling through photos and has the other advantage that the photo can be easily enlarged. I am testing out the new technology by developing demonstration biodiversity assessment charts for flax, *Phormium tenax* and cabbage tree, *Cordyline australis*. In addition to the invertebrates that can be identified on each plant species, I am including predators and parasitoids associated with some of the herbivores, and some of the fungi and other micro-organism.

The identification charts for each plant species are available for three levels of expertise, Student, Standard and Expert. The first part of each identification chart has pictures of what a person should be able to identify at level of expertise. Beyond this are pictures of other things the person might see, but is not expected to look for. On flax,

a student is expected to recognize the flocculent flax scale and the steel blue ladybird, but not to distinguish between two other white scale insects and other black or brown ladybirds. In the standard level I expect a person to recognize the symptoms of predatory caterpillar damage to flocculent flax scale colonies.

Each identification guide has a matching recording form for the plant species and level of expertise. Eventually, I would like to see these linked in the computer.

The long term vision is for an internet site where people can get the latest version of the identification guides and recording forms for the plant species in the habitat of interest. There would be guides for 50 plus plant species and a repository for all the survey data.

And back down on the farm the progress of the restoration project to protect the waterways from dairy cows can be monitored by assessing the increasing invertebrate and fungal biodiversity on each of the plant species and comparing this with a National and regional standard for this suit of plants.

In the meantime please checkout the demonstration identification guides for flax and cabbage trees and send me your feedback. [//plant-synz.landcareresearch.co.nz/index.asp](http://plant-synz.landcareresearch.co.nz/index.asp)



Two mines in a leaf of *Melicactus ramiflorus*, made by larvae of mahoe leaf miner: *Liriomyza flavolateralis* (Diptera: Agromyzidae) tunnelling through the leaf. This is the only species of insect forming leaf mines in mahoe, which is also its only known host.

## COMMERCIAL EEL FISHING DATABASE UNDERWAY

Bill Chisholm, Chisholm Associates

The South Island Eel Industry Association, in partnership with NIWA and the North Island Eel Enhancement Company, have developed a GPS-based datalogging project which uploads freshwater fisheries and habitat data into a central database. The project was developed to capture GPS-based data on eel catch, effort and ancillary information on freshwater habitats where commercial eel fishing operations occur. The ancillary data includes hydrometric, water quality and photographic data of the freshwater habitats being fished.

The fyke-net catch is recorded in the database using the following fields:

- *GPS position.*
- *Shortfin eel catch* (estimated catch of legal shortfin eels).
- *Longfin eel catch* (estimated catch of legal longfin eels).
- *Number and species of eel released* (mature migrant eels, and longfin eels > 4kg are released unharmed).
- *Bycatch species* (e.g. koi carp, giant kokopu, perch, etc).

Environmental and other data are also recorded. These data have a one to one relationship with the catch site, so the presence/absence of fish can be correlated with habitat and habitat changes. Environmental data fields include:

- *water temperature* (°C)
- *river flow*
- *comments*
- *site photograph*

Field trials of the dataloggers by selected eel fishermen in Southland demonstrated a successful proof of concept. This has allowed it to now be implemented nationwide. The electronic data capture tool, and associated database, is a method for the industry to become more closely involved in obtaining information for freshwater management issues. Fishers are able to use the new technology successfully in the field to capture robust data.

While not all eel fishermen are yet using the datalogging system, uptake of the system has been rapid, and is over 50% in most fished areas of the South Island. Those eel fishermen involved in the development and use of the system fully appreciate the possibilities of such a system to capture ancillary environmental information, and its wider use in freshwater management.

NIWA is responsible for the overall management and operation of the central database. The information held is the property of the South Island Eel Industry Association (for South Island data) and the Eel Enhancement Company (for North Island data). Database queries and further information can be obtained from:

- North Island – Tom Hollings, Ph 027 4953953 em: [tom@hrm.co.nz](mailto:tom@hrm.co.nz)
- South Island – Bill Chisholm, Ph 027 2214739 em: [bill@chisholm.co.nz](mailto:bill@chisholm.co.nz)

## BOOK REVIEW

### VANISHING NATURE: FACING NEW ZEALAND'S BIODIVERSITY CRISIS

**Marie A Brown, R T Theo Stephens, Raewyn Peart and Bevis Fedder**, Published by the Environmental Defence Society in 2015, RRP NZ\$45, (paperback). ISBN: 978-0-9876660-4-8

*Reviewed by Johannes Welsch, Faculty of Environment, Society and Design, Lincoln University*

It is refreshing to see that this book provides a broad introduction to the historical perspective of changes in biodiversity since human settlement in New Zealand. It elaborates on the constant battle of economic interest versus biodiversity and ecosystem services protection or the lack thereof. The authors advocate to every New Zealander to see themselves as custodians of the land and develop a stronger stewardship ethic to look after it. However, the book does not hide the fact that, New Zealand being an international hot spot for biodiversity, has major issues with the rate and decline of its very jewel.

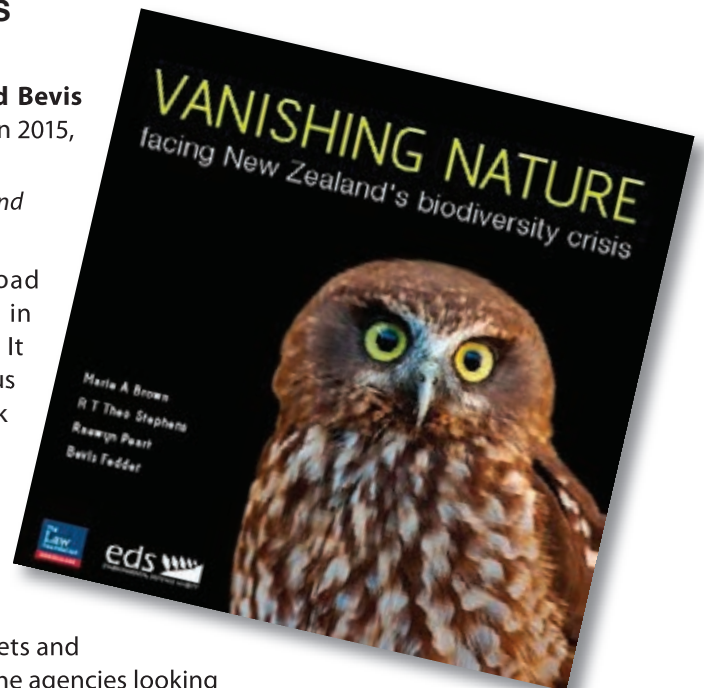
The book takes the reader on a ride through all the facets and aspects of biodiversity and its management. This includes the agencies looking after public land and resources, private landowners, legal frameworks and possible solutions to halt or reverse the current biodiversity loss. The book provides social, ecological and economic perspectives, in a very structured manner and framed by the central question of this book: "... why does biodiversity loss and ecosystem service degradation still continue at such alarming rates?"(p.19)

With this question in mind, the authors go on a quest to illustrate the most up-to-date (2014) research and background, identify key players, and describe the legal frameworks and processes (including national, regional and local). The book stands out by identifying issues, highlighting the gaps in the legislative environment and emphasises solutions including showcasing projects with biodiversity benefits for each topic.

The book provides a chapter for each of the four main ecosystems, including public land, private land, freshwater and marine environment within the context of biodiversity loss (Chapter 3-6). Each chapter discusses the context, laws, policies and legal framework that governs biodiversity and convinces through the immense amount of research and background provided. The issue of biodiversity loss in all four environments is described. At the same time I found myself wondering: how come, biodiversity protection on both public and private land seems to be much more developed and refined, both on a legislative framework as well as executed, compared to the marine environment. Is it because we, as a society, have been dealing with land policies for decades if not centuries? Whereas, both freshwater and marine environments seem to be very young topics, where less is known and even lesser seems to be safeguarded. The book certainly highlights the need to quickly catch up with the reality of loss in these two, but really all four, important environments for New Zealand.

Once the reader reaches Chapter 7, the dire state of the country's biodiversity is obvious, at the same time one feels uplifted reading about the countless public, private and joint projects across the country. Each one of them trying their best to halt further decline or impact. The amount of time, resources and planning involved deserves much more recognition from the wider society and government. The authors note that the effectiveness of these approaches could improve with some more resource availability, centralised oversight and alignment to further maximise the output and benefit for biodiversity. This would support monitoring the effectiveness and results achieved through community projects and help to quantify community's contribution and the social capital of conservation, which are still mostly unknown to date.

'Finding solutions' is a chapter that has been hinted at, in several chapters before, to provide options and solutions of how to get out of the current state of increasing loss. While it provides numerous solutions on a strategic, tactical and practical level, the number is almost overwhelming. The explanations provided are sometimes rather underwhelming and leave ample opportunity for a follow up book where several options can be further explained and cross comparisons provided. In particular, the explanation of an 'Environmental consumption tax' could have more depth, considering it has been named several times earlier as a solution.



*continued next page*

Overall, this book is genuinely accessible to students, politicians, policy makers, ecologists, scientists and the lay reader. Cleverly, and unusually for a textbook, it is an easy read and provides an invisible but clear structure to each topic and is not unnecessarily wordy. Each chapter section is bite sized, with an excellent section of photographs and info boxes on key examples and issues including a strong human dimension within every topic.

The authors argue that the linking of public and private organisation and programs is required to raise the profile of ongoing biodiversity loss across the country. We must appreciate that managing NZ biodiversity is a service provided by everyone for everyone, society as a whole. Most importantly, the point of that knowledge is the key driver for change. The examples and case studies are entirely drawn from New Zealand. While these concepts and ideas are applicable to other parts of the world, it is in this country, that the book will find its true value. This book should be an essential reading for students, ecologists and conservationist.

"Vanishing Nature" was produced with support from The New Zealand Law Foundation and Environmental Defence Society. It is published by Environmental Defence Society Incorporated. For more information visit their website <http://www.eds.org.nz>

## ACROSS THE TASMAN

### News from the Ecological Society of Australia (ESA)

To stay up to date on all things ecological from across the Tasman, you can access the ESA Bulletin here <https://www.ecolsoc.org.au/publications/bulletin>. Members of NZES are entitled to a discounted membership for ESA as part of a reciprocal agreement between the societies. ESA membership includes eight issues of the journal, Austral Ecology amongst other benefits (<https://www.ecolsoc.org.au/member-services>).

## NZES CONFERENCE 2015

### NZES 2015 conference update

The 2015 NZES conference at the University of Canterbury, Christchurch, is now less than two months away (15-19 November) and planning is well advanced. We have an exciting programme of workshops, field trips, plenary speakers, symposia, contributed papers, posters, students day and of course social events on offer. Full details can be found at [www.nzes2015.org](http://www.nzes2015.org)

The deadline for early-bird registrations is fast approaching (29 September) and we have kept registration rates this year the same the last couple of years. However, one big difference this year is that thanks to our wonderful sponsors we have been able to include the cost of the social functions (welcome reception, poster session and conference dinner) within the overall conference fee – so please tick YES to all the social events when registering for the conference!

The deadline for papers and posters has passed, but we are still happy to accept late posters up until 29 September. If you would like to still submit a poster please email [conference2015@newzealandecology.org](mailto:conference2015@newzealandecology.org) with your poster abstract (the official abstract submission portal is now closed).

Students – please sign up for the exciting Student Day on Sunday 15 November! If you are a student presenting in the main conference sessions and would like to be considered for a student award, please provide us with a little bit of extra detail by September 29 to help with a fair judging process (details on Presenters page of website).

We have a great range of workshops and field trips available on the Monday of the conference, which are either free of charge or low cost. The field trips will provide the opportunity to visit a diverse range of ecosystems from the Christchurch red-zone to the high Southern Alps! Another highlight of the conference is the evening public lecture by Devon McLean who has been closely involved with a range of conservation projects and programmes in New Zealand including Project Crimson, Project Janszoon, Zero Invasive Predators and the NEXT Foundation, and is a member of the NZ Conservation Authority. Devon will talk about philanthropy and non-government roles in conservation.

A particular emphasis at this year's conference is on sustainability. One of our plenary speakers, Peter Kareiva from The Nature Conservancy (USA), is joining us by video link, rather than contributing to unnecessary CO<sub>2</sub> emissions through flying to New Zealand. We have a strong focus on recycling with our caterers having a strong commitment to this. We will be using reusable crockery rather than throw-away materials, while all unused food will be given to those in need. We are also featuring local beverages, e.g. Three Boys Brewery is our craft beer on offer – founded by a former UC Biology staff member.

See you there!

*The NZES 2015 organising team*

For further information: [nzes2015.org](http://nzes2015.org) or follow us on Twitter: @NZES2015



## NEWS FROM COUNCIL

### COUNCIL 2016

Our AGM will take place at the New Zealand Ecological Society conference at the University of Canterbury, Christchurch, at lunchtime on Wednesday 18 November. We will be looking for several new positions on Council. We will require a **new president** and **vice-president**, as per the society rules. Several councillors are moving to overseas work positions, or are helping the society in other ways, so we will be looking for **at least three replacements on council**. We are keen for someone to take on the awards role within Council. We would also be interested in a person to take on the Treasurer role, and another to help with the website. The existing secretary is happy to stand again, but this position must be voted on each year. Later next year we will also be looking for someone who is willing to prepare the quarterly newsletter of the society. Please let existing councillors know if you are interested in taking on one of these roles.

### MOTION TO ADD TO THE OBJECTS OF THE SOCIETY IN THE NEW ZEALAND ECOLOGICAL SOCIETY RULES.

The council has prepared a motion to add an object to the rules of the society. The rules of the society can be read on the New Zealand Ecological Society website at <http://newzealandecology.org/sites/newzealandecology.org/files/NZES%20rules%202013.pdf> The existing objects of the society are:

#### "2. OBJECTS

The objects of the Society shall be to;

1. promote the study of ecology and the application of ecological knowledge in all its aspects.
2. publish the New Zealand Journal of Ecology"

The council considers that one of the key reasons we exist is to promote discussion, the exchange of ideas, communication and collaboration among New Zealand ecologists, and the international ecological community. This is a major role for our annual conference, newsletter and other aspects of our society. We suggest the following third motion.

3. foster collaboration and communication amongst ecologists.

### COUNCIL MEETINGS

In recent years the NZES Council has had two annual face to face meetings at a convenient main centre in New Zealand, met once at the start of the annual conference, and also has had regular meetings throughout the year by Skype as required. In 2015 we met once in a face to face meeting in Wellington, and will do so again at the start of the conference in Christchurch.

In July, the council trialed a new way to run a face to face meetings. Those based in Auckland met at the University of Auckland, while those based outside Auckland joined in by Skype. The president travelled to Auckland from Rotorua to run the meeting. This was done partly to save money, but also reduced the carbon footprint of the meeting.

## LETTER CALLING FOR ACTION ON CLIMATE CHANGE

*This is the text of a letter sent to politicians in New Zealand calling for action on climate change after a gathering of heads of ecological societies from across the globe at the ESA100 meeting in Baltimore. See below for the conference report by Chris and Shona.*

### Subject: COP21, 21st United Nations Conference on Climate Change

Attached is a call from World Ecologists urging Parties meeting this December in Paris to take decisive steps to address the effects of climate change.

At the 100th Annual Meeting of the Ecological Society of America Presidents of a number of international ecological societies and associations met to address issues related to the field of Ecological Science. Discussion was dominated by a shared concern at the severe and ongoing erosion of global natural assets including genetic diversity, species, habitats and ecosystem processes that people rely on for survival. This erosion will be further accelerated and exacerbated with current climate change.

Please accept the attached call for Parties meeting in Paris for the 21st Conference of the Parties (COP21) to come to an agreement.

We count on New Zealand to ensure that the Parties take **the decisive steps urgently needed to prevent a 2°C rise in average global temperatures** as recommended by the Intergovernmental Panel on Climate Change (IPCC).

We are the signatories of International Association for Ecology (INTECOL) and NZ Ecological Society (NZES), two of the Ecological Societies represented in the attached motion. The President of INTECOL is currently from New Zealand. Both INTECOL and NZES strongly support this motion.

**INTECOL** is the umbrella organisation for ecological societies worldwide, and it has 2700 individual members from more than 100 countries worldwide. INTECOL supports ecological science and its application around the world, and was set up to foster international participation to address important ecological questions. Communication is supported globally through co-sponsoring of international meetings and exchanges of information between members. The 12<sup>th</sup> INTECOL Congress will be held in Beijing in 2017.

**NZES** was formed in 1951 to promote the study of ecology and the application of ecological knowledge in all its aspects. With over 500 members, NZES is New Zealand's leading professional society for applied and pure research ecology and publishes the New Zealand Journal of Ecology, the primary publication for ecological science and research in NZ. The Society has held an annual conference in each year since it was formed.

New Zealand has an important role to play in representing world ecological societies and scientists.

We urge New Zealand to ensure that 2015 will mark decisive changes towards this essential objective.

Yours sincerely

Shona Myers

President INTECOL

Chris Bycroft

President New Zealand Ecological Society

## CALL OF WORLD ECOLOGICAL SOCIETIES RELATED TO THE COP21

### World Ecologists urge the Parties meeting this December in Paris to take decisive steps against climatic change

The 10th of August 2015 during the 100th Annual Meeting of the Ecological Society of America the Presidents of 11 Ecological Societies and of two major Associations and Federations of Ecological Societies, representing over **20 000 scientists** from **over 100 countries** and over **40 national ecological societies**, met to address key issues related to the field of Ecological Science.

They shared their concern about the severe and ongoing **erosion of global natural assets** including genetic diversity, species, habitats and ecosystem processes that people rely on for survival. This erosion will be further **aggravated with current climatic change**.

Given that an important cause of these changes is the impact of people on the climate, the Presidents urge the Parties meeting in Paris in December during the 21<sup>st</sup> Conference of the Parties (**COP21**) of the United Nations Climate Change Conferences, to take **the decisive steps urgently needed to prevent a 2°C rise in average global temperatures** as recommended by the Intergovernmental Panel on Climate Change (**IPCC**). This is very likely the last decade when it will be possible to achieve this together and to establish a global legacy of a healthy planet for generations to come.

#### Signatories

- International Association for Ecology (INTECOL) <http://www.intecol.net/>
- European Ecological Federation (EEF) <http://www.europeanecology.org/>
- British Ecological Society (BES) <http://www.britishecologicalsociety.org/>
- Ecological Society of America (ESA) <http://www.esa.org/esa/>
- Ecological Society of Argentina (AsAE) <http://www.asaeargentina.com.ar/>
- Ecological Society of Australia (ESA) <http://www.ecolsoc.org.au/>
- Ecological Society of Japan (ESJ) <http://www.esj.ne.jp/esj/>
- Ecological Society of Mongolia
- French Ecological Society (SFE) <http://www.sfecologie.org/>
- Israel Society of Ecology and Environmental Sciences (ISEES) [www.isees.org.il](http://www.isees.org.il)
- Italian Society of Ecology (SIe)
- Mexican Scientific Society of Ecology (MSSE)
- New Zealand Ecological Society (NZES) <http://newzealandecology.org/>

This initiative is also getting the **full support** of the **Society for Conservation Biology** <https://conbio.org/>, a society representing over **4 000 scientists**.

Contact: **Shona Myers**

Affiliations: **President INTECOL**

**Chris Bycroft**

**President New Zealand Ecological Society**

## CONFERENCE REPORT

### Ecological Society of America Conference at Baltimore, Maryland: Celebrating the Centennial of the American Ecological Society 1915-2015. 9-14 August 2015.

Chris Bycroft (President, New Zealand Ecological Society) and Shona Myers (president, INTECOL, International Association for Ecology) attended a meeting of leaders of world ecological societies at the 100th Ecological Society of America Conference in August 2015. The conference was significant occasion for the American Ecological Society (ESA), as it celebrated its Centennial. They both took the opportunity to attend this meeting, and the conference. Shona attended the conference to network on behalf of INTECOL and meet with representatives from other national and international societies in preparation for the 12th Congress in Beijing 2017.

Prior to the indoor part of the conference there was two days of field trips and workshops. Chris chose to go on a field trip on the vegetation, flora, and fauna of the Potomac River, including visiting Great Falls of the Potomac, on the border of Maryland and Virginia. Discussions included work being undertaken on threatened species, invasive species, and problems with high deer numbers. One pest plant highlighted was Japanese stiltgrass (*Microstegium vimineum*), which dominates forest ground cover in places. This plant could potentially be a problem invasive species if it ever arrived in New Zealand.



*Japanese stiltgrass (Microstegium vimineum) an invasive pest plant species of forest habitat in forest surrounding the Great Falls of the Potomac.*

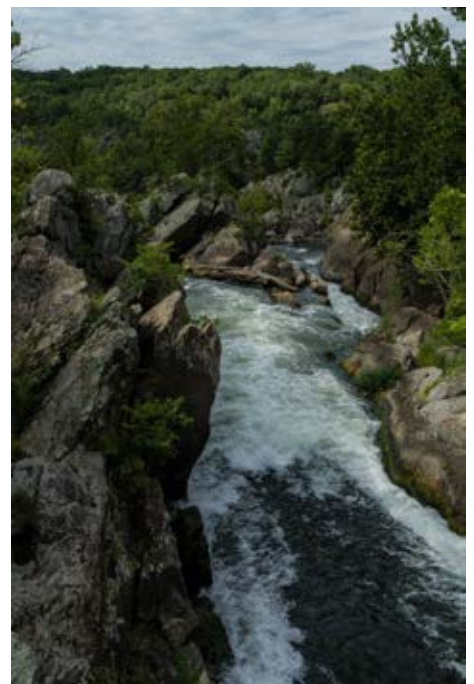


*Field trip delegates discussing the ecology of the Potomac River Catchment.*

Shona visited the Long Term Research sites in Baltimore. The Baltimore Ecosystem Study has a long history of urban ecology research and of linking social science research with ecology. It aims to understand metropolitan Baltimore as an ecological system. We visited very successful restoration sites as well as areas with significant challenges.



*Long-term research site in central Baltimore—degraded urban stream*



*Rapids, just downstream of the Great Falls of the Potomac River.*

A highlight for Shona was also visiting the High Line in New York City after the conference. This is an amazing urban greening success story.

The conference itself, was of a very large scale with over 5,000 delegates, and events taking place most days from early in the morning to late evening, from Sunday evening to Friday lunchtime. For most of the conference there was well 30 concurrent sessions. The opening of the conference occurred on Sunday evening, in a massive hall in the Hilton Hotel, located adjacent to the Baltimore Convention Centre. We had to bypass 10,000 people attending a BronyCon (My Little Pony) conference (mostly adults and many who were dressed up in seriously scary costumes), who were finishing their meeting as we were starting ours. Ironic that they had about twice the number of delegates than ESA. The conference opened with a brilliant string quartet performance by the Fry Street Quartet, called "The Crossroads Project". This group performed and discussed how science can identify unprecedented risk, and the inability of society to respond to the science.

The Monday morning began with a Scientific Plenary, and ESA awards session. A surprise for everyone in the audience occurred when President Obama came in on pre-recorded video to address the conference, and congratulate it on reaching 100 years. The video can be seen on the ESA website. One item we were impressed with at the introduction to the conference was the listing of things members could do for their society, by the president of ESA, David Inouye. A session followed with some great discussions and papers on ecology's relevance to the Earth's future.

The leaders of the world's ecological societies took place in an Italian restaurant on the Monday evening. Eighteen people attended the dinner. Each person spoke about the society they were representing, and brought an idea to share with the other societies. The New Zealand Ecological Society Council decided that we should mention *New Zealand Journal of Ecology* Reviewer Mentoring Scheme. At the meeting a couple of motions were proposed. The key one for our society was a motion on world ecologists urging world leaders to take decisive action on Climate Change (see above in Newsletter).



*The High Line, NYC*



*Meeting of world leaders at Ecological Society of America conference in Baltimore. Back row (standing): Takashi Saitoh (President, Ecological Society of Japan), Miguel Martínez-Ramos (President, Ecological Society of Mexico), Jean-Louis Martin (President, French Ecological Society), Alberto Basset, President Italian Society of Ecology), Bazartsuren Boldgiv (representing the Ecological Society of Mongolia), Laura Yahdjian (member of the Board, Ecological Society of Argentina), Bill Sutherland (Council President, British Ecological Society), David Inouye (President, Ecological Society of America), Åsa Langefors, (Managing Editor of Oikos, Nordic Society Oikos), Stefan Klotz (President, European Ecological Federation), Mike Bull (Managing Editor - Austral Ecology, Ecological Society of Australia), Daniel Orenstein (Board member, Israel Union of Ecology and Environmental Science), Chris Bycroft (President, New Zealand Ecological Society). Front row (seated): Monica Turner (President-elect, Ecological Society of America), Mark Vellend (on behalf of President Judy Myers, Canadian Society for Ecology & Evolution), Hazel Norman (Executive Director, British Ecological Society), Katherine McCarter (Executive Director, Ecological Society of America), Shona Myers (President, INTECOL).*

The Ecological Society of America is addressing the need to increase the cultural diversity of its membership. They have items such as diversity lunches, as well as special events (e.g. lunches) for members with religious affiliations and minority groups. They also have a policy group which facilitates the transfer of ecological research into political decision making.

On the final night of the conference there was a celebration "ESA 100 Year Bash" at a craft brewery, in an outdoor setting. Food was from a large number of food trucks. A great idea for a climate that is unlikely to be threatened by regular rainfall.

Finally, we would like to thank the Ecological Society of America for the invitation to attend the leaders meeting. It was a great opportunity to discuss ideas with other societies. A particular thanks goes to the warm welcome by David Inouye (president) and Katherine McCarter (Executive Director) of ESA at the dinner for ecological society leaders.

## POSTGRAD PROFILES

### **Kalinka Rexer-Huber: PhD student, Otago University, with Bruce Robertson and Jon Waters**

After an MSc at Otago University I worked as a conservation biologist on a series of South Atlantic and Southern Ocean islands, before coming home in 2013. My research continues on the theme of southern ecosystems and seabirds.

My PhD centres on white-chinned petrels (*Procellaria aequinoctialis* Linn), the most-caught seabird in commercial fisheries bycatch. White-chinned petrels breed on a number of islands around the Southern Ocean. Our subantarctic Antipodes, Campbell and Auckland Islands support white-chinned petrels, but very little is known about these populations.

Conservation management questions about population sizes, tracking, taxonomy and the island origin of fisheries bycatch birds underpin my PhD. I am in the midst of estimating the size of the white-chinned petrel population on the Auckland Islands. This will be useful for assessments of global population status and trends, and for seabird-fisheries risk assessment work.

I am tracking white-chinned petrels from the Auckland Islands, and collaborators are contributing tracking data from the Antipodes, Marion and South Georgia. I look at these broad-scale movement data at both regional and global scales. These movement patterns help visualise key foraging areas and migration belts, and allow us to superimpose important fishing areas on important feeding areas.

I also compare populations using molecular genetics tools. How related are white-chinned petrels from different islands? For example, can we treat all white-chins in NZ waters as one regional population? Finally, I am assessing population genetic structure globally, with the aim to determine the origin of petrels caught as fisheries bycatch.

My hope is that these four lines of investigation will, together, draw a clearer picture to help inform conservation management decisions.



White-chinned petrel study site, Adams Island. Photo: Graham Parker.

## UPCOMING MEETINGS

### **International Society of Root Research Symposium**

"Roots down under: Belowground solutions to global challenges"

6–9 October 2015

Canberra, Australia

[www.isrr9.com.au](http://www.isrr9.com.au)

### **New Zealand Plant Conservation Network conference**

"Nurturing our conservation roots for generations to come"

28–30 October 2015

Dunedin, New Zealand

[www.nzpcn.org.nz](http://www.nzpcn.org.nz)

### **New Zealand Freshwater Sciences Society and Australian Society of Limnologists Joint Conference 2015**

23–26 November 2015

Wellington, New Zealand

<http://nzawaterconference.com/>

### **Ecological Society of Australia annual conference**

29 Nov – 3 Dec 2015

Adelaide, Australia

[www.ecolsoc.org.au/conferences/esa-2015-annual-conference](http://www.ecolsoc.org.au/conferences/esa-2015-annual-conference)

### **British Ecological Society annual conference**

13–16 December 2015

Edinburgh, Scotland

[http://www.britishecologicalsociety.org/events/current\\_future\\_meetings/2...](http://www.britishecologicalsociety.org/events/current_future_meetings/2...)

### **Southern Connection 2016**

The VIII Southern Connection Congress

18–23 January, 2016.

Punta Arenas, southern Chile

<https://www.umag.cl/southernconnection2016/>

### **Island Biology 2016**

An international conference on island evolution, ecology and conservation.

18–22 July 2016

University of Azores, Terceira, Azores

<http://www.islandbiology2016.uac.pt>

## THE NOTICEBOARD

### CONSERVATION OF BRAIDED RIVERS

BRaid (Braided River Aid) have two upcoming courses of interest to Ecologists. The first is a trapping workshop on 17 October in Rangiora. See [braid.org.nz/trapping](http://braid.org.nz/trapping) for further details. The second is on endangered birds on 3 November in Lincoln. See [braid.org.nz/helpsaveus](http://braid.org.nz/helpsaveus) for further details. Both courses are free and BRaid has received very positive feedback from past recipients with many rating the courses as extremely useful.

### DONATE NOW!

#### KAURI FUND FOR ECOLOGICAL SCIENCE

We invite you to help grow the science of ecology in New Zealand by contributing to the NZES Kauri Fund. This fund was established in 2001 to provide resources for initiatives that assist the development of ecology and ecologists in New Zealand. As the Fund grows, it will play an increasingly critical role in advancing the Society's goals and fund exciting new initiatives for New Zealand ecology.

Please consider a donation to the Kauri Fund, whether \$10, \$20 or \$50, now or when you renew your subscription. You can contribute in two ways:

Send a cheque made out to: "NZES Kauri Fund" to the New Zealand Ecological Society, PO Box 5075, Papanui, Christchurch 8542.

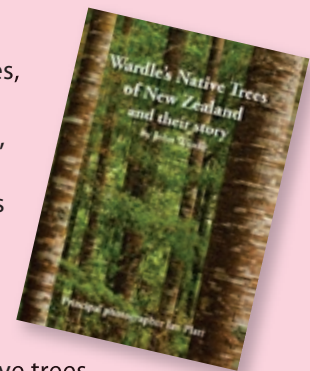
Internet banking: credit to New Zealand Ecological Society, account 06 0729 0465881 00, identify the payment as "Kauri Fund".

### SPECIAL OFFER FOR NZES MEMBERS

NZ Farm Forestry Association has offered to sell copies of the book "Wardle's Native Trees of New Zealand and their story" at a discounted price to NZ Ecological Society members. Normal retail price is \$95 including GST and postage but to clear remaining stocks they are discounting this to \$65 including GST and postage. We would be happy to make a donation of say \$10 to the Kauri Fund from each copy sold to Ecol. Soc. members. Proceeds of sale of the books are shared by NZFFA, the NZFFA Indigenous Forest Section, and the Neil Barr Farm Forestry Foundation. Both NZFFA and the Foundation are registered charities.

The NZFFA website is [www.nzffa.org.nz](http://www.nzffa.org.nz) To order the book, people could post a cheque made out to NZFFA along with their delivery details to Ecol. Soc. Offer, c/- NZFFA, PO Box 10349, The Terrace, Wellington 6143. To order with credit card they could phone 04 472 0432 between 9:00 a.m. and 3:00 p.m. weekdays.

About the book—  
Hardback, over 400 pages, over 300 colour photos mostly taken by Ian Platt, includes botanical and ecological characteristics of 233 species. John Wardle is a former NZ Forest Service scientist who has spent most of his life working with native trees. Book is described as authoritative and easy to read.



## Office Holders of the New Zealand Ecological Society 2014/2015

(Effective from November 2014)

In the first instance, please send postal or e-mail correspondence to:

**Secretariat (society office – Susan Sheppard)**

NZ Ecological Society Secretariat  
PO Box 5075  
Papanui  
CHRISTCHURCH 8542  
Physical Address:  
46 Genesis Drive  
Edendale, RD 1  
CHRISTCHURCH 7671  
P: 64 3 318 1056  
F: 64 3 318 1061  
E: [nzecosoc@paradise.net.nz](mailto:nzecosoc@paradise.net.nz)  
W: [www.nzes.org.nz](http://www.nzes.org.nz)

*President*

**Chris Bycroft**

Wildland Consultants  
PO Box 7137  
Te Ngae  
ROTORUA 3042  
E: [chris.bycroft@wildlands.co.nz](mailto:chris.bycroft@wildlands.co.nz)

*Immediate Past President*

**Mel Galbraith**

School of Natural Sciences  
Unitec New Zealand  
Private Bag 92025,  
Carrington Road, Mt Albert  
AUCKLAND  
P: 64 9 815 4321 ex 7296  
M: 64 25 694 8139  
E: [mgalbraith@unitec.ac.nz](mailto:mgalbraith@unitec.ac.nz)

*Vice President*

**Deb Wilson**

Landcare Research  
Private Bag 1930  
Dunedin 9054  
P: 64 3 470 7212  
E: [wilsond@landcareresearch.co.nz](mailto:wilsond@landcareresearch.co.nz)

*Secretary*

**Sandra Anderson**

The University of Auckland  
Private Bag 92019  
AUCKLAND  
P: 64 9 023 5290  
E: [sh.anderson@auckland.ac.nz](mailto:sh.anderson@auckland.ac.nz)

*Treasurer*

**Clayson Howell**

Department of Conservation  
PO Box 10-420,  
WELLINGTON  
P: 64 4 471 3113  
M: 021 973 181  
E: [chowell@doc.govt.nz](mailto:chowell@doc.govt.nz)

*Councillors (4)*

**Olivia Burge**

School of Biological Sciences  
University of Canterbury  
Private Bag 4800  
CHRISTCHURCH

**Ellen Cieraad**

Landcare Research  
PO Box 40  
LINCOLN 7640  
P: 64 3 321 9827  
E: [cieraade@landcareresearch.co.nz](mailto:cieraade@landcareresearch.co.nz)

**George Perry (Awards Convenor)**

School of Environment & School of  
Biological Sciences  
University of Auckland  
Private Bag 92019  
AUCKLAND  
E: [awards@newzealandecology.org](mailto:awards@newzealandecology.org)

**Debra Wotton**

Moa's Ark Research  
14 Tui Road  
Raumati Beach  
PARAPARAUMU 5032  
E: [debra.wotton@moasark.co.nz](mailto:debra.wotton@moasark.co.nz)

*Journal scientific editor*

**Jo Monks**

Department of Conservation  
PO Box 5244  
Dunedin 9058  
P: 64 3 371 3746  
E: [editor@newzealandecology.org](mailto:editor@newzealandecology.org)

*Journal technical editors*

**Anne Austin**

Landcare Research  
Private Bag 11052  
Manawatu Mail Centre  
PALMERSTON NORTH 4442  
E: [techeditor@nzes.org.nz](mailto:techeditor@nzes.org.nz)  
E: [austina@landcareresearch.co.nz](mailto:austina@landcareresearch.co.nz)

*with assistance from:*

**Christine Bezar**

Landcare Research  
PO Box 69, LINCOLN 7640

*Newsletter editor*

**Cate Macinnis-Ng**

School of Biological Sciences  
University of Auckland  
Private Bag 92019  
AUCKLAND  
E: [Newsletter@newzealandecology.org](mailto:Newsletter@newzealandecology.org)

*Webmaster*

**Laura Young**

School of Forestry  
University of Canterbury  
Private Bag 4800  
CHRISTCHURCH  
P: 64 3 364 2987 ex 3881  
M: 64 21 668 084  
E: [webmaster@newzealandecology.org](mailto:webmaster@newzealandecology.org)

*INTECOL President and NZ representative*

**Shona Myers**

Myers Ecology  
62 Onewa Rd  
Northcote  
Auckland 0627  
E: [shona.myers@vodafone.co.nz](mailto:shona.myers@vodafone.co.nz)

### SUBMISSIONS TO THE NEW ZEALAND ECOLOGICAL SOCIETY NEWSLETTER

Contributions from NZES members are sought in the form of:

- **Feature articles** on topics of interest to NZES members
- **Event announcements**, for listing on the Noticeboard
- **Conference reports**, on conferences of ecological relevance
- **Images**, for *Illustrate Ecology* on the newsletter cover
- **Ecology news from overseas**
- **Book reviews**
- **Post graduate profiles**

**Feature articles** can be up to 1,000 words accompanied by up to four images.

**Conference reports** should be around 600–800 words with up to three images.

**Illustrate Ecology images** should be accompanied by a short title and a caption explaining the ecological concept illustrated.

**Book reviews** of up to 1,000 words are now published in the newsletter. If you would like to review a book of interest to NZES members, please contact the newsletter editor.

**Postgraduate profiles** of current or recent PhD, MSc, or Honours students should be no more than 200–300 words and include a 2-sentence blurb about yourself, a summary of your thesis written for a general scientific audience, and a photo and caption related to your research.

Please do not use complex formatting—capital letters, italics, bold, and hard returns only, no spacing between paragraphs. All photos should be emailed as high resolution (300 dpi) jpg files. All contributions and enquiries can be emailed to Cate Macinnis-Ng, the Newsletter Editor: [newsletter@newzealandecology.org](mailto:newsletter@newzealandecology.org)

*Unless indicated otherwise, the views expressed in this Newsletter are not necessarily those of the New Zealand Ecological Society or its Council.*

**Content for the December 2015 issue of the NZES Newsletter is due by Friday 11 December 2015.**



## MEMBERSHIP APPLICATION

**PLEASE COMPLETE ALL SECTIONS AND EMAIL OR POST TO THE ADDRESS BELOW**

### A PERSONAL DETAILS

Circle Title: Prof Dr Mr Mrs Ms Miss	Last Name:	First Name(s):
Mailing Address:		Post Code:
E-Mail:		
Phone Bus:	Fax Bus:	Phone Private:

### B MEMBERSHIP DETAILS

Occupation/Expertise:
Name of Employer:

### C TYPES OF MEMBERSHIP AND SUBSCRIPTION RATES (2013)

(please tick the class for which you qualify)

*Membership is open to any person interested in ecology and includes botanists, zoologists, teachers, students, soil scientists, conservation managers, amateurs and professionals*

<input type="checkbox"/>	<b>Full</b>	Receive journal and newsletter	\$90.00* p.a.
<input type="checkbox"/>	<b>Unwaged Member</b>	Is available only on application to Council for full-time students, unwaged or retired persons. Unwaged members may receive the journal but must specifically request it.	\$55.00* p.a.
<input type="checkbox"/>	<b>Overseas Full</b>	Receive journal and newsletter	\$115.00* p.a.
<input type="checkbox"/>	<b>Overseas Unwaged</b>	Is available only on application to Council for full-time students, unwaged or retired persons. Unwaged members may receive the journal but must specifically request it.	\$75.00* p.a.
<input type="checkbox"/>	<b>Tasman Linkage</b>	Available only to members of the Ecological Society of Australia. Tasman Linkage members may receive the journal but must specifically request it.	\$55.00* p.a.

\* There is a \$10 rebate for members who renew before 15 February each year and for new members

**Make cheques payable to: NZ Ecological Society**

**Bank account details for direct payment: 060729 0465881 00 (make sure your name is included)**

- Tick if you wish to make a donation to the Kauri Fund (see NZ Ecological Society website for details)
- Tick if you wish to make a donation to the Barlow Fund (see NZ Ecological Society website for details)
- Tick if you don't have an email address to receive the newsletter which is sent out electronically

The New Zealand Journal of Ecology is printed digitally and in hard copy. Please indicate which option you prefer. Receiving the journal digitally will allow more funds to go towards Society projects like the Kauri Fund.

Digital  Hard copy

**Signature of Applicant:** \_\_\_\_\_ **Date:** \_\_\_\_\_